

**REMARKS/ARGUMENTS**

Petition is hereby made under the provision of 37 CFR 1.136(a) for an extension of three months of the period for response to the Office Action. Our cheque in respect of the prescribed fee is enclosed.

The Examiner commented on the IDS of August 23, 2001 and the listing of references on pages 14 to 17. All the references listed on those pages are cited on the PTO-1449.

The Examiner made the restriction requirement final, withdrawing from consideration claims 1 to 18, 21 and 29 to 40. These claims, with the exception of claim 21, now have been deleted. Such deletion is made without prejudice to applicants right to file one or more divisional or continuation application directed to such subject matter.

The Examiner indicated that there should be specific reference to the priority claim. The prior insertion prior to the first line of the specification has been amended to refer to the provisional application and the claims to priority under 35 USC 119(e). It is submitted that the claim to priority is now correctly made.

The Examiner indicated that the application lacked an Abstract. An Abstract is hereby added and provided on a separate sheet, enclosed herewith.

The Examiner previously rejected claims 19, 20 and 22 to 28 under 35 USC 101 as claiming the same invention as that claims 19, 20 and 22 to 28 of copending Application No. 09/453,289. The latter application now has proceeded to grant as US Patent No. 6,676,949. It will be seen that claims correspond to claim 19, 20 and 22 to 28 of US Patent Application No. 09/453,289 were not granted from that application.

The Examiner rejected claim 26 under 35 USC 112, first paragraph, as failing to comply with the written description requirement with respect to plasmid pCDNA3/MOMP and deposit of this plasmid.

No deposit has been made of this plasmid. The manner of preparation of the plasmid is fully described in Example 1 and shown in Figure 5. In addition, preparation of the plasmid also is enclosed in US Patent No. 6,235,290, issued on Application No. 08/893,381. It is not clear on what basis the Examiner believes the specification lacks a written description of the plasmid having regard to the detail provided in the specification.

Having regard thereto, it is submitted that claim 26 complies with the provisions of 35 USC 112, first paragraph, and hence the rejection should be withdrawn.

The Examiner rejected claims 19, 20 and 22 to 28 under 35 USC 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter the applicant regards as the invention.

The Examiner raised a number of issues in this regard:

- claim 19 has been amended to refer specifically to MOMP as the protein and hence claim 20 has been deleted.
- claim 19 has been amended, as discussed below with respect to the prior art rejection to refer to a host, thereby providing antecedent basis for the term in claim 23.
- claim 26 has been amended to delete reference to Figure 5.

Having regard to the revisions made to the claims, it is submitted that the wording of claims 19, 20 and 22 to 28 is definite and hence the rejection thereof under 35 USC 112, second paragraph, should be withdrawn.

The Examiner rejected claims 19, 20 and 22 to 28 under 35 USC 102(b) as being anticipated by Murdin et al.

Claim 19 has been amended to specify the presence of a promoter operatively coupled to the nucleic acid molecule for expression of the protein in cells of a host to which the attenuated strain is administered but not in the attenuated bacteria. Further, claim 19 specifies that the nucleic acid molecule and promoter are in a vector. Claim 23 has been deleted and the dependency of claims 24 and 25 corrected accordingly. In addition, as already noted above, the claims are limited to the nucleic acid molecule encoding the major outer membrane protein (MOMP) of a strain of *Chlamydia*.

The Murdin et al reference is limited to the protein being the inclusion membrane protein C of a strain of *Chlamydia*. Nowhere does Murdin mention the MOMP protein and nowhere describes an attenuated bacterium harbouring the nucleic acid molecule encoding MOMP in combination with the specific promoter claimed in claim 19.

Having regard thereto, it is submitted that Murdin et al does not anticipate applicants claims and hence the rejection of claims 19, 20 and 22 to 28, insofar as they remain in the application and in their amended form, under 35 USC 102(b) as being anticipated by Murdin et al, should be withdrawn.

The Examiner rejected claims 19, 20, 22, 27 and 28 under 35 USC 102(e) as being anticipated by Caldwell et al.

Caldwell discloses the nucleotide and deduced amino acid sequences of the four variable domains of the MOMP of the 15 serovars of *C. trachomatis*. The paragraphs to which the Examiner refers teach the use of *Salmonella typhimurium* for expression of MOMP variable domain sequences. As discussed above, the promoter sequence used herein is chosen so as not to express the MOMP in the attenuated bacteria.

Accordingly, it is submitted that claims 19, 20, 22, 27 and 28, insofar as they remain in the application and in their amended form, are patentable over the applied art and hence the rejection thereof under 35 USC 102(e) as being anticipated by Caldwell et al, should be withdrawn.

It is believed that this application is now in condition for allowance and early and favourable consideration and allowance are respectfully solicited.

Respectfully submitted,



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